



The STEWARD

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Michael F. Easley
Governor

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William G. Ross Jr.
Secretary, DENR

STATE ACQUIRES CHIMNEY ROCK

LANDMARK ADDED TO STATE PARK AT HICKORY NUT GORGE

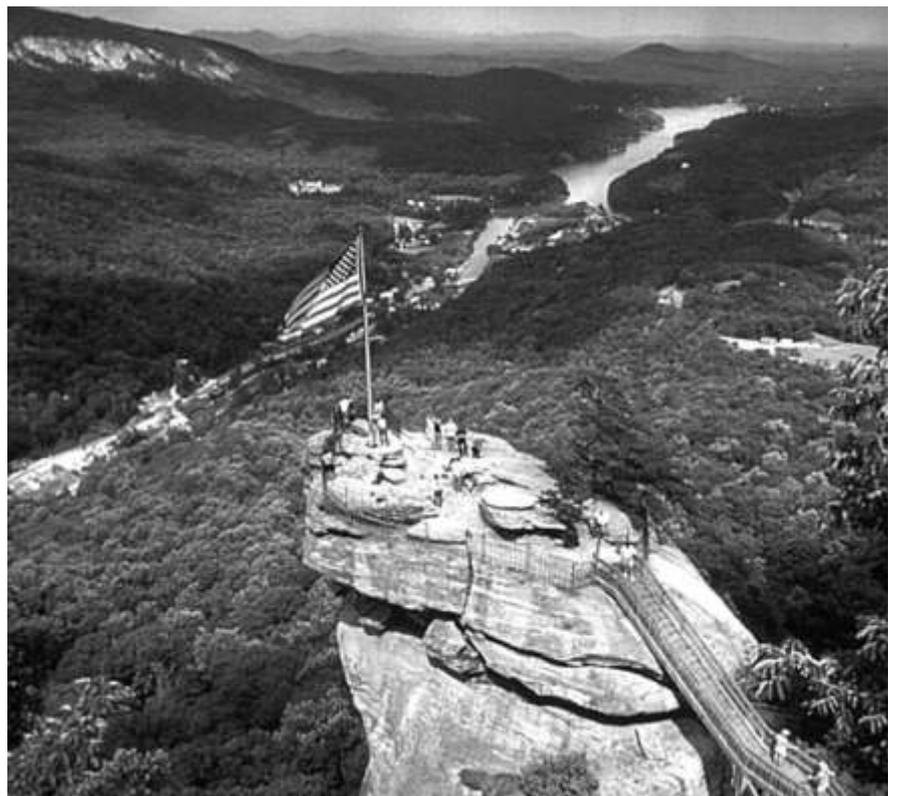
The state will purchase Chimney Rock Park, a popular attraction in Rutherford County, to become the centerpiece of a new state park now under development at Hickory Nut Gorge, Governor Mike Easley announced Jan. 29.

The \$24 million acquisition is expected to be completed in May and will add the 996-acre property to another 2,264 acres already acquired for the new state park that was authorized by the General Assembly in 2005.

"The acquisition of Chimney Rock adds one of the most visible images of our North Carolina landscape to our state parks system, alongside Mount Mitchell, Jockey's Ridge, Pilot Mountain and our other crown jewels," Easley said during a news conference at the park.

"It will be the centerpiece of what is certain to become a world class state park at Hickory Nut Gorge. The Morse family has maintained careful stewardship of this land for more than 100 years, and we intend to continue that stewardship."

Also attending the news conference were representatives



The signature feature of the park is a 315-foot-tall rock spire overlooking the gorge and Lake Lure in Rutherford County.

of several land conservancies involved in the development of the state park as well as local governments that offered strong support for the acquisition.

The park is 25 miles southeast of Asheville and features a signature 315-foot-tall spire that offers 75-mile views of

the gorge and Lake Lure. Visitors reach this point through a 198-foot tunnel carved into the mountain's rock face and an elevator that climbs 26 stories.

There is a network of hiking trails leading to unique geologic features and the 404-

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UP CLOSE AND 'PERSONNEL'

Lynn Anderson is the new maintenance mechanic at New River State Park. He is a 1979 graduate of West Wilkes High School and worked for more than 17 years in a similar position with the Wilkes County school system.

Daniel Moore has been promoted to Maintenance Mechanic IV at William B. Um-

stead State Park. He has nearly 12 years related experience, including more than 2 1/2 years at the park. He is a graduate of Louisburg College and Pfeiffer University. He is also trained as a first responder and in fire management.

Robert Carasiti has joined the staff at William B. Umstead State Park as a main-

tenance mechanic. He has an associate's degree from Suffolk Community College in Riverhead, NY, and more than three years experience in a similar position.

Christina Cucurullo is the new office assistant at Falls Lake State Recreation Area. A graduate of Millbook High School in Raleigh, she attended East Carolina University and has volunteered and worked in seasonal positions at the park for the past three years.

Dena Wilkins has joined the staff at Jordan Lake State Recreation Area as an office assistant. She brings nearly 17 years of related experience to the job, including work as an office manager and as a seasonal office assistant at the park. She attended high school in Emporia, KA, and attended Central Carolina and Wake Technical community colleges.

Trudy Whitney has been promoted to Park Ranger II at Kerr Lake State Recreation Area. She has been at the park for more than five years and prior to that, worked as a seasonal ranger for the National Park Service. She holds a bachelor's degree from UNC-Greensboro.

GOOSE CREEK WINS

Goose Creek State Park in Beaufort County won a first place award in December for its float in Belhaven's annual Christmas parade.

The park's "Christmas in the Wilds" entry featured animals gathered around a bird-friendly Christmas tree. There were several dozen entries from the region including the towns of Bath, Washington and Pantego.

From The Director's Desk

The acquisition of Chimney Rock Park is certainly one of the benchmark events in the history of the state parks system. For some time, we've recognized the potential for a world-class state park in the Hickory Nut Gorge due to the scenery, the recreation potential and the significant natural resource value.

The development of the state park is also a world-class example of partnership, with significant contributions from the citizens in western North Carolina, the local governments, the conservation community, the General Assembly and the governor's office. It's been a gratifying experience and sets a high standard for us to follow.

Also gratifying was the turnout last month for the dedication of a new visitor center at South Mountains State Park. More than 75 people came to the event. I think it is the regard that people in that area have for this ruggedly beautiful park and the excitement over a handsome new facility. Another factor was the high esteem that people in that community have for Susie Hamrick Jones. We took the opportunity to present Susie with an award from the National Association of State Park Directors for her contributions to conservation through The Foothills Conservancy. Many of her friends and colleagues came to share in our appreciation of Susie.

It is with great sadness that we note the passing of Thomas C. Ellis, who was truly one of the founding fathers of the parks system with a long tenure as superintendent and director. Like many others, I benefited greatly from his professional support and personal friendship. I was honored to join with Sen. Bob Atwater to provide a eulogy. For decades after his retirement, Tom was an ardent and active advocate for state parks. I often talk about how, if we're to reach for greater things, we stand on the shoulders of those who've gone before us. Like so many in the history of the parks system, Tom had very broad shoulders.

Sincerely,



Lewis Ledford

LAND CONSERVATION STRONG IN '06

In its 90th Anniversary year, the state parks system brought 5,101 acres of land into conservation in partnership with the private conservation community and with support from the Parks and Recreation, Clean Water Management and Natural Heritage trust funds.

That is but one of the 2006 accomplishments reported by the Division of Parks and Recreation in an annual report to the Department of Environment and Natural Resources.

The report also noted advances in capital projects, sustainability and the State Trails Program.

Through its land conservation efforts, the division advanced its New Parks for a New Century initiative by establishing the recently authorized Carvers Creek Sandhills State Park with 1,393 acres and Hickory Nut Gorge State Park with 2,264 acres. Land acquisition efforts continue at those new parks.

Additionally, two rare ecosystems became represented in the parks system as the N.C. General Assembly authorized the Mountain Bogs and Sandy Run Savannahs state natural areas.

The first land acquisition of 101 acres for Sandy Run in Pender County was completed with the help of The Nature Conservancy. The existing Beech Creek Bog natural area will be combined with similar bog areas elsewhere in Avery County.

Other significant land acquisitions during the year included the largest single addition ever to New River State Park at 638 acres. The acquisition protects 1.6 miles of river

shoreline just downstream of the Wagoner Road Access.

And, 549 acres were added to Elk Knob State Natural Area, protecting the summit area of The Peak, the highest mountain in Ashe County.

Among capital projects, a new 7,500-square-foot visitor center at South Mountains State Park was dedicated in December, representing an investment of \$2.6 million.

Also, new visitor centers are under development at Merchants Millpond, New River and Raven Rock state parks and at Dismal Swamp State Natural Area. The division's design and development group completed a swing-span access bridge across the Dismal Swamp Canal to open the way for that project.

A major expansion of the campground at Stone Mountain State Park was completed.

And, at Hanging Rock State Park, four vacation cabins were built and six existing cabins were renovated.

All the capital projects were funded through the Parks and Recreation Trust Fund.

In the area of sustainability, the division began registering major construction projects, including four park visitor centers, for certification by the national Leadership in Energy and Environmental Design (LEED) program of the U.S. Green Building Council.

The LEED program is considered an industry standard for environmentally sustainable construction.

The division also expanded its fleet of fuel-efficient vehicles and installed its first ethanol fueling center at Jordan

Lake State Recreation Area.

A record \$17.7 million was channeled into local park acquisition and development projects through 55 grants from the Parks and Recreation Trust Fund, administered by the division.

In the 12-year history of the fund, more than \$91 million has been awarded through 477 matching grants to municipal and county recreation programs in all areas of the state.

The division's State Trails Program had an especially active year. In July, the program initiated a memorandum of understanding with nine local governments to support the Haw River Trail through five counties. That is part of a broader corridor plan developed for the Mountains-to-Sea Trail in the central piedmont.

With the help of its friends group, a 10.5-mile link of the Mountains-to-Sea Trail was dedicated, completing a 210-mile segment of the trail in the mountain region, stretching from Balsam Gap eastward to near Blowing Rock.

And, a new program to establish paddle trail standards resulted from a grant-funded videoconference series in partnership with NC State University.

The division was recognized as the Government Conservation Partner of the Year by the Conservation Trust of North Carolina, a consortium of 24 land trusts.

The state parks system was given special recognition by the Sandhills Conservation Partnership for contributions toward expanding and protecting habitat for the endangered red-cockaded woodpecker.

foot Hickory Nut Falls and a nature center. It has been a popular tourist attraction since a crude stairway was built to the rock's summit in 1885.

The park and Chimney Rock Co. are owned by the descendants of Lucius Morse, who bought the property and began to develop the park in 1902. Todd Morse is the president and general manager.

Funding for the acquisition is through a \$15 million appropriation of the General Assembly, grants from the state's Parks and Recreation, Natural Heritage and Clean Water Management trust funds and a \$2.35 million contribution from an anonymous private donor.

The potential sale was first discussed more than two years ago when Lucius "Lu" Morse, Todd's father and grandnephew of the park's founder, met Lewis Ledford, director of the state parks system at a national parks conference in St. Louis.

Morse congratulated Ledford on establishment of the new state park in Hickory Nut Gorge, although he wanted it known that



Todd Morse, left, president of Chimney Rock Co., and Gov. Mike Easley sign document during event at the park.

the Morse family was involved in estate planning, and that Chimney Rock could potentially be under different ownership or management. Ledford reminded him that the state's citizens had always looked to conserve its special places and that state parks and the State Property Office would be open to further discussion.

Following multiple meetings between Ledford, the Morse family and the State Property Office and after appraisals, the state first offered \$20 million.

In mid-2006, the family listed the property internationally for \$55 million.

Late in 2006, Dick Ludington and Mike Leonard, representing The Conservation Fund, became directly involved in the negotiations and acted as intermediaries with the anony-

mous donor.

"Meaningful conservation is always the result of meaningful partnerships and this is a great example," Ledford said. "This agreement would not have happened without the help of land conservancies, the essentially unanimous support of the local community and the confidence of the General Assembly.

"And, we owe special thanks to Sen. Walter Dalton and all of the local legislative delegation for unwavering support."

Dalton led the effort for the \$15 million legislative appropriation. A group of local citizens formed an ad hoc organization to build support for the acquisition. That included a strong letter-writing campaign to the governor's office and the parks system.

The Morse family and Chimney Rock Co. will continue to operate the park at least through the end of the 2007 season, and by mutual consent could operate it another two years. The company has the option of temporarily clos-

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PARTNERS

IN THE ACQUISITION OF CHIMNEY ROCK PARK

*The Conservation Fund
The Nature Conservancy
Carolina Mountain Land Conservancy
Foothills Conservancy of N.C.
Parks and Recreation Trust Fund
Natural Heritage Trust Fund
Clean Water Management Trust Fund
N.C. General Assembly
Sen. Walter Dalton
Rep. Bob England
Town of Lake Lure
Chimney Rock Village
Friends of Hickory Nut Gorge
Rutherford Outdoor Coalition
Carolina Climbers Coalition
The Access Fund
Upper Broad River Protection Program*

CHIMNEY ROCK

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ing it during a short transition period in November.

Todd Morse said that the decision to sell was a wrenching one because of the family's attachment to Chimney Rock. But, he added, "As stewards of this special property for over 100 years, our goal was to achieve an outcome that was the best result for the land, the community, our associates and our family."

Under the agreement, the state parks system will continue to operate Chimney Rock Park in a similar manner until the park is fully integrated into the state parks system.

The park's annual visitation averages about 250,000 and it has 28 fulltime employees.

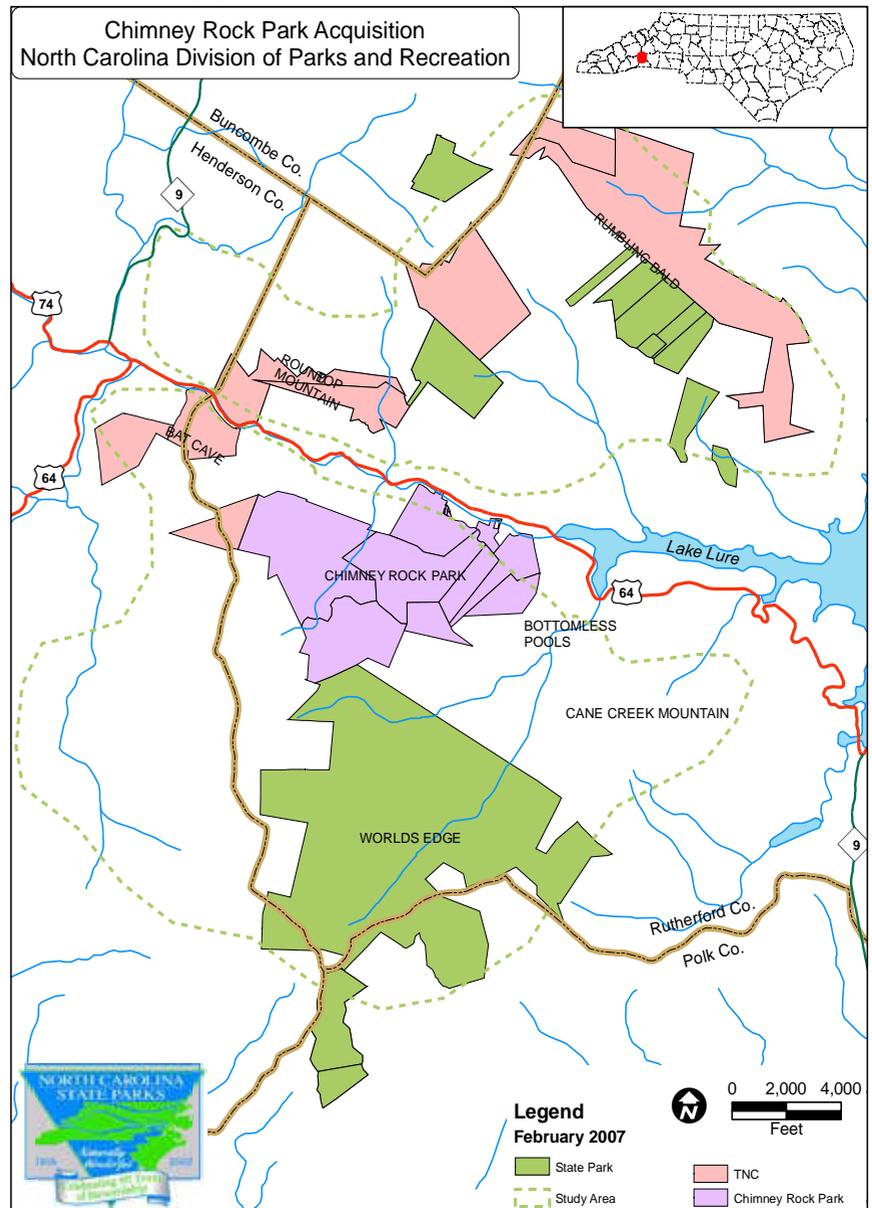
During 2007, the parks system will develop an operations plan for the park. It is expected to ask the General Assembly for some permanent staffing in the 2007-09 biennium budget.

The Morse family's legacy of stewardship at Chimney Rock will be perpetuated in future exhibits of the state park. And, a plaque honoring that stewardship near the park's summit will remain in place.

The acquisition will add an incredible scenic element and ready-made visitor facilities to a developing state park that has premier natural resource value. The gorge offers 36 rare plant species, 14 rare animal species and an array of rare habitats in a region of spectacular cliffs, fissure caves and unusually rich soils.

The Nature Conservancy has been aggressive in land conservation in the gorge for years and has been a principal partner in developing the state park.

In 2005, the sensitive World's Edge property of 1,568



Chimney Rock Park is located virtually at the center of the original study area for the state park at Hickory Nut Gorge and helps to complete a corridor of conservaton lands.

acres just southwest of Chimney Rock was acquired by The Nature Conservancy and the Carolina Mountain Land Conservancy and transferred to the state.

In addition, more than 400 acres on the north side of the gorge on Rumbling Bald Mountain have been added to the park. The Nature Conservancy owns about 850 acres on the mountain and other tracts, including those in the Bat Cave area, which it

intends to donate for the park.

The Chimney Rock acquisition gives the state and the conservancies a C-shaped arc of protected properties that offers potential for a critical wildlife/species corridor.

At some point in the near future, a master plan for the state park will be created, a process that allows for public comment and addresses options for further development and resource protection.

More than 75 people turned out for the dedication of a new visitor center at South Mountains State Park in Burke County.



SOUTH MOUNTAINS OPENS NEW FACILITY

A new 7,500-square-foot visitor center at South Mountains State Park was formally dedicated by the Division of Parks and Recreation Dec. 17.

More than 75 people attended the brief ceremony before a ribbon was cut to open the center, which sits on a hillside near the park's entrance overlooking the Jacob Fork River.

"Nearly 200,000 visitors make their way into this stunning state park each year," said Lewis Ledford, director of the division. "With all that the park has to offer, it's hard to imagine anything could add to their experience, but this visitor center will."

The project represents an investment of \$2.9 million from the N.C. Parks and Recreation Trust Fund.

Beyond being a focal point for the park and a gathering place for visitors, the center will serve an important educational role. An integrated exhibit hall will be completed in 2007 that will explore the natural and cultural resources of the region with museum-quality exhibits.

The center also features a teaching auditorium, laboratory/classroom and staff offices. The



State Sen. Jim Jacumin, left, and staff watch as Emily Griffith, daughter of Superintendent Jonathan Griffith, center, cuts the ribbon.

project is the latest in a program to equip state parks with modern visitor centers and exhibit halls, begun in the mid-1990s when the trust fund was established.

Steve Padgett, chairman of the park's advisory committee, said the center is a wonderful gift for all the state's citizens.

"This building has been needed for many years and has been a high priority of the park advisory committee, second only to land acquisition," he said.

State Sen. Jim Jacumin was serving as a Burke County commissioner when the park opened in 1974 and is a former member of the Parks and Recreation Authority. At the ceremony, he said the center makes an inviting entrance to North Carolina's largest state park.

"When you invite people into your home, that first greeting is so important. That's what this visitor center will do," he said.

The center serves a broad educational purpose, allowing rangers to present interpretive programs in bad weather and allowing introduction to the park before conducting tours.

Its site has a long history in education. Nearby on the knoll, the one-room, log York schoolhouse operated from 1840 until 1928.

It was an educational and community center for the farm families in the once-remote foothills area. The structure has been relocated to the Asheville home of a descendent of builder James York.

The visitor center, a steel-framed building faced with siding and native stone, incorporates a number of energy-saving features. Deep roof overhangs and the extensive use of glass on the building's north side are calculated to save cooling and lighting costs.

The native stone was quarried in nearby

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NATIONAL PARKS GROUP HONORS JONES

Susie Hamrick Jones, executive director of The Foothills Conservancy of North Carolina, was presented the 2006 President's Award of the National Association of State Park Directors Dec. 17 for her contributions to conservation and to the development of state parks in western North Carolina.

Lewis Ledford, director of the state parks system, presented the award to Jones during the dedication of a new visitor center at South Mountains State Park, a gathering that included members of the conservancy.

The association offers the award to individuals who have made an extraordinary contribution at the state, regional or national level to furthering the goal of a national system of state parks.

"Susie has been directly involved in significant expansions at South Mountains and Lake James state parks and is at the forefront of support for a new park under development at Hickory Nut Gorge. She has been a tireless advocate and friend of North Carolina's state parks for many years," Ledford said.

"Her passion and perseverance have led to the conservation of tens of thousands of acres in the Blue Ridge foothills."

Jones, who lives in Burke County, helped found the South Mountains Coalition in 1994 with the intent of helping the state park grow. In 1997, the organization changed to The Foothills Conservancy with an expanded mission of protecting an eight-county region that includes the headwaters of the Catawba, Yadkin and Broad rivers.

Since that time, the organization has been directly involved in the conservation of about 40,000 acres in the foothills region, including 21,000 acres

SOUTH MOUNTAINS

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McDowell County. And, natural landscaping will be used extensively.

"We are aggressively moving our construction projects toward certification by the national Leadership in Energy and Environmental Design (LEED) program of the U.S. Green Building Council, and this center is testament to that commitment to sustainability," Ledford said.

The structure was designed by Asheville architects John Rogers and Craig Chenvert, and general contractor was David E. Looper and Co. of Hickory.



Ledford, left, presented NASPD award to Jones. added to South Mountains State Park and nearby state gamelands.

Jones was instrumental in forging an agreement in 2003 creating the opportunity for the state to purchase 2,915 acres from Crescent Resources Inc. to add to Lake James State Park. The acquisition protects more than 24 miles of shoreline on the lake and expands the park to six times its former size.

She encouraged Crescent and Burke County government to create a long-range development plan for the region that seeks to balance conservation and development goals.

The conservancy has also helped to protect another 5,000 acres north of the park near the Linville River gorge.

The National Association of State Park Directors recognizes the essential contributions made to our nation's system of parks by volunteers, friends organizations and allied conservation organizations. Susie and The Foothills Conservancy represent the very finest of these citizen efforts," said Charles Salkin, president of the organization and director of Delaware's state parks system.

"Not only can the people of North Carolina be proud of Susie's dedication to them, but all Americans benefit from her advocacy and successes."

Jones said she began what has become a 12-year career by "just trying to get people to thinking about protecting their backyard before it was gone."

"It's a huge honor, but then I'm humbled to have been chosen," she said. "It's just indicative of these special lands we've been privileged to have been born into or have chosen to live."

Seasonal employees Heather Smith, Phil Endorf and Brian Edwards haul shell material to the first reef. (Photo by Aaron McCall of The Nature Conservancy.)



PARTNERSHIP RESTORING OYSTER REEFS

By Matt Windsor, Ranger
Jockey's Ridge State Park

Even in a protected natural area like Jockey's Ridge State Park, loss of habitat and lower diversity of plant and animal life is still a concern.

In keeping with the park's mission to preserve and protect the environment, the park has joined forces with The Nature Conservancy, the N.C. Division of Marine Fisheries and the North Carolina Coastal Federation to restore oyster reefs in Roanoke Sound behind the park, and ultimately, to restore wetland areas as well.

Jockey's Ridge staff, park volunteers, and Nature Conservancy Northeast Regional Steward Aaron McCall teamed up to construct three oyster reefs in the soundside area of the park during the summer.

With the help of Greg Allen of the Division of Marine Fisheries, the reefs were legally designated research sanctuaries, meaning that oysters growing on the reefs, and the reefs themselves may not be disturbed or harvested.

In North Carolina, oyster reefs have declined 90 percent from historic levels due to decline in water quality and over-harvesting. Historical accounts from the 1700s point to oyster reefs so numerous as to be hazards to navigation, and oysters so large that they had to be cut into pieces to be eaten.

Why are oysters so important? A market size eastern oyster (*Crassostrea virginica*) can filter up to 50 gallons of water a day. Oyster reefs have been declared essential fish habitat and can support up to 300 species of plants and animals, making them comparable with coral reefs in biodiversity.

In addition, oyster reefs alter currents and protect marsh areas from erosion by reducing wave action.

Oysters are hermaphroditic and prefer to establish themselves by cementing themselves to other oysters. When water temperatures reach the mid 70s in the spring and fall, oysters are stimulated to spawn and produce free-swimming larva. During this critical period the larval oysters must attach themselves to a hard surface and will spend the rest of their life cemented in one place.

An oyster reef develops as oysters begin to colonize their own shells over the years. Depending on local conditions, oysters may form small patch reefs that are exposed to tidal fluctuations or larger subtidal reefs in areas that aren't exposed by tides.

Since juvenile oysters prefer to settle on

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Small fish and invertebrates are plentiful after one month colonizing a bag of shell.

OYSTER REEFS

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another oyster shell, putting old shells back into the estuary helps create new reefs. Reefs at Jockey's Ridge were built with mesh bags of recycled oyster shells from local restaurants, courtesy of the conservancy. This project is funded by the National Oceanic and Atmospheric Administration's Community Based Restoration Program.

(One of the most important things that everyone can do to ensure that they can continue to enjoy oysters is to recycle empty shells. The park is now a recycling center for oyster shells.)

Once the reef is in place, juvenile fish and invertebrates begin using it as shelter, and invertebrates that need a hard surface to settle on, such as bryozoans, hydroids, barnacles, and juvenile oysters, settle out of the plankton and colonize the dead oyster shell.

In the park program "Restoring the Oyster," participants help sample some of the diversity of the reef and watch as one of the oyster shell bags is lifted and literally drips with life as juvenile blue crabs, grass shrimp, gobies, blennies, and skillettfish wriggle free.

On days when the water is clear, program participants have watched schools of juvenile sheepshead, pigfish, and pinfish dart around and graze the surface of the reef.

I have been documenting the fish and invertebrate species, as well as water quality, around the new reefs for the parks system's Natural Resource Inventory Database, and have watched the list of fish and invertebrate species continue to grow as new life has found the reefs.

We simply did not have the needed habitat for many of these fish and invertebrates that depend on hard bottom habitat. Many of the reef-complex species such as sheepshead, pigfish, and



Sheepshead quickly become common residents of oyster reef complexes.

gray snapper began showing up in large numbers in our seine pull programs once the reefs were established.

Other fish such as naked gobies depend on empty oyster shells to provide shelter for their eggs and are now abundant in the area of the reef. In addition, the reefs buffer beds of submerged aquatic vegetation, and the rest of the shoreline from erosion.

The local erosion rate for some areas of our sound front is as much as five feet per year, so oysters as well as improved habitat may provide a more natural and beneficial way to combat erosion as an alternative to methods of stabilization that aren't compatible with a protected natural area.

With the encouraging early results of the new oyster reefs, we've met with the North Carolina Coastal Federation to seek advice on how to expand the project and include wetland restoration for the last remaining areas of brackish and salt marsh along Jockey's Ridge's rapidly eroding shoreline.

Jockey's Ridge State Park is now going to be one of several sites to receive funding from the National Oceanic and Atmospheric Administration's Community Based Restoration Program pending successful approval of a grant application in the spring of 2007, thanks to the help of partners such as the N.C. Coastal Federation, The Nature Conservancy, and the Division of Marine Fisheries.

The project will consist of expanding restored oyster reefs and low breakwaters, to allow recolonization of eroded areas with submerged aquatic vegetation, and planting wetland vegetation on restored areas of marsh.



Oyster shell bag after it's been colonized by living oysters. (Photo by Aaron McCall.)

TRAPPING PROGRAMS ADD TO KNOWLEDGE

Shrews are interesting. No, really.

The water shrew, its tiny feet a blur, can actually walk on water for up to five feet. The southern pygmy shrew is tied with the bumblebee bat for title as the smallest known mammal in the world.

And then there's the northern short-tailed shrew. He packs enough venom to knock out a small snake.

It's very likely that all these critters are out there somewhere in the carefully protected habitats of North Carolina's state parks. But, nobody knows for sure because, in most cases, documented sightings haven't been recorded.

And if they're out there, it'd be handy to know where.

That's what Ed Corey's trying to do. The inventory biologist for the state parks system is promoting small mammal live trapping programs to document as many of the creatures as possible by enlisting the help of park rangers and university students.

"My job is basically to go around and help you guys identify what you have in the parks. We're going to try to identify and monitor anything smaller than a housecat," Corey told a group of about a dozen rangers, most of them from western parks, at a recent workshop at Lake James State Park.

Corey used a Powerpoint program to introduce the rangers to 30 species of critters potentially to be found in the western region.

Besides eight species of shrews, rangers were taught the habits and visual clues for voles, rats, squirrels, mice (21



Julie Reynolds, right, a Duke University professor, and student Kelsey Shaw check a trap at Eno River State Park.



species of rodents, in all) as well as moles, rabbits and the small carnivores – weasels, minks and skunks.

"Sightings of many common species have been noted, but lists seem to really be lacking," Corey said. "All our parks have the habitat potential for a variety of species. One of our goals is to get a glimpse of the species diversity in similar habitats at different parks."

Some of the species are indicators of habitat, and monitoring them can give clues about the health of the park's natural resources, he said.

And perhaps most importantly, species lists can help the parks system's natural resources team make good decisions when issues arise about resource management or

when the time comes to refine management policies.

From a ranger's point of view, time spent trapping and documenting small mammals can add to the cumulative knowledge of a park and broaden the skills and knowledge of the ranger. And, tales of interesting and rare creatures can certainly enliven interpretive programs.

At Lake James, Corey and the rangers walked both wetland and upland areas checking small wire traps and "Sherman" traps, which are square metal tubes.

The traps are baited with peanut butter and cotton balls. (If they're not hungry, the animals may be interested in the cotton as nesting material.) Captured animals are identified, measured, photographed and then released.

Farther east, Corey has enlisted the help of students at Duke University who participated in intensive, week-long

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At left, park rangers at a seminar learn about establishing a trapping program. Above, Corey with a white-footed mouse just before it was released.

TRAPPING PROGRAMS

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trapping programs at Eno River State Park and Oconeechee Mountain State Natural Area.

Undergraduate students in a population biology class helped as Corey set and checked 20 traps at each park.

Julie Reynolds, a Duke biology professor, said some of

her 14 students were involved in writing case studies of mammal populations in the Eno River corridor, and others were learning how to write research proposals.

“It’s worked out wonderfully. There’s great cooperation between us and the park,

and the parks have been fabulous to work with,” Reynolds said.

The manpower is welcome, Corey said. And, the small mammal trapping programs may generate more interest in research at area parks by Duke and other universities.

ATLAS SOLICITS SPECIES OBSERVATIONS

Have you ever seen an eastern kingsnake in your backyard or in a state park, or found a Fowler’s toad on your porch, and wondered if wildlife biologists need to know about it?

These observations are important, and now there is a place to submit such observations that can help with the conservation of amphibians and reptiles in the Carolinas.

The Carolina Herp Atlas (CHA), developed by the Davidson College Herpetology Laboratory and the college’s Information Technology Services branch, is a new online database that uses observations by citizen scientists to track reptile and amphibian distribution.

Funded by the Wildlife Resources Commission, the CHA also allows users a simple way to maintain a personal database of the reptiles and amphibians they observe. County-level distribution maps can be viewed by anyone who visits the website.

Wildlife biologists and herpetologists can use the data to understand activity periods, habitat relationships, distribution, conservation status and



Redbelly water snake is in the atlas.

other facts of amphibian and reptile ecology.

Here’s how the CHA works. Before submitting records, a participant must register and set up a “My Herps” account. Once you register, you can add records and keep track of observations. Each observation should include state and county, genus and species, date, location, geographic coordinates (using the CHA GeoLocator), remarks and a digital photo for species verification.

Observations can be submitted to the CHA at www.carolinaherpatlas.org.

PARK NOW OFFERING ETHANOL FUEL

The state parks system has installed an E-85 (85% ethanol) fuel storage facility at Jordan Lake State Recreation Area in Chatham County for use by park staff there and to be a demonstration project in the area.

The parks system becomes the first state agency, other than Motor Fleet Management, to offer the option. Ethanol is non-toxic, biodegradable and renewable fuel and has a high-oxygen content for a more complete burn than other fuels.

The recreation area has 10 vehicles that use E-85, and others are being purchased throughout the system as ethanol becomes available.

The move is in support of a directive of the Department of Environment and Natural Resources to be a leader, participant and communicator in charting the state's course toward sustainability. The department has challenged its divisions to reduce the use of petroleum-based fuels by at least 20 percent by 2010.

The effort was spearheaded by Jerry Howerton, head of the division's facility maintenance section and involved the help of the park and south district staff.

"The project was made possible through Jerry's determination, commitment and creative approach, and it reflects the parks system's commitment to sustainability," said Lewis Ledford, division director.

Howerton said that E-85 is a proven alternative to gasoline and diesel fuel, but that a distribution system in



Conversion of one fuel tank at Jordan Lake State Recreation Area offers ethanol for 10 of the park's vehicles.

North Carolina is still being developed. The challenge, he said, was to partner with Motor Fleet Management and the Department of Administration to arrange for a reliable source.

The solution was to share deliveries from a Greensboro distributor, he said.

The state parks system intends to explore ways to offer E-85 fuel at other parks. Most state parks have some type of fuel storage facilities. Obviously, some are in remote areas where availability becomes a key issue, Howerton said.

The park plans to devise new interpretive programs using the E-85 project to educate the public. Themes explored will be the importance of alternative fuel, reducing our dependence on foreign oil, the advantages of using a locally generated fuel, the effects of greenhouse gases on air and water quality and the overall issue of sustainability.

The cost of the tank

conversion was \$800.

"This is a very modest expense considering it's a significant first step in reducing the division's ecological footprint and will serve as a springboard for other similar sustainability efforts across the state parks system," Ledford said.

"And, it demonstrates that changes such as this one are not as difficult or complicated as they first appear."

He added that nearby communities, such as Apex, Cary, Raleigh and Durham can benefit from Jordan Lake's experience with E-85.

The division will continue to work with the Department of Administration, the Department of Transportation and other agencies by demonstrating the facility and sharing the steps and process for conversion. The intent is to offer an ongoing demonstration project to share ideas about the importance of more sustainable practices.

THOMAS C. ELLIS, FORMER DIRECTOR

Thomas C. Ellis, 94, of Wake Forest, a former superintendent and director of the Division of Parks and Recreation, passed away Jan. 30.

During a 35-year career, Ellis was among those who fashioned North Carolina's state parks system and imbued it with the mission of conservation, education, recreational opportunities and public service.

A native of Bladen County, Ellis began his state government career in 1942 as area ranger of Bladen Lakes State Forest, having come to state government as a veteran of the Civilian Conservation Corps and the U.S. Forest Service.

By 1952, he had served a senior park warden, senior park ranger and superintendent of Singletary Lake Group Camp, one of the state's oldest parks.

From 1952-55, he served as superintendent of Morrow Mountain State Park. Moving into an administrative role, he became assistant superintendent of state parks in 1955. He served from 1961-72 as superintendent and from 1972-77 as director.

During his tenure in those leadership roles, 18 state parks were founded and the amount of acreage managed by the state parks system more than doubled.

Also under his leadership, a system of state natural areas – representing some of the most rare and treasured natural resources – was established. Also, the Natural and Scenic Rivers System was established and the State Trails System was founded.

The rapid expansion of the state parks system was due, in large measure, to Ellis' skill at combining resources from state appropriations, private donations and grants from the federal Land and Water Conservation Fund.

Soon after assuming the role of superintendent in 1961, Ellis directed a smooth transition to a fully integrated state parks system. Under his leadership in ensuing years, the system developed a program of master plans and general management plans that assured consistent, thoughtful and environmentally sustainable development.

And, resources were directed to initiatives in environmental education, allowing that to become one of the hallmarks of the state parks mission.

Ellis was respected by his colleagues



Receiving the Order of the Long Leaf Pine in 2005, Ellis, second from left, posed with, from left, former Superintendent Tom Wells, former Director Phil McKnelly and current Director Lewis Ledford.

and renowned in the profession, having earned the particular attention and gratitude of former Governor Robert Scott. He was a member of the National Recreation and Parks Association and a director of the National Conference of State Parks. In retirement, he remained an active member and an officer in Friends of State Parks.

In May 2005, Jonathan Howes, chairman of the Parks and Recreation Authority, and Division Director Lewis Ledford presented Ellis with the Order of the Long Leaf Pine, North Carolina's highest honor for service and dedication.

In a statement, Ellis' family said, "Daddy was a man who was bigger than life and whoever's life he touched, he left a part of himself. He was deeply devoted to his God, his family and friends and his work. He was a man of deep and abiding faith with a very personal relationship with God and Jesus Christ. He will be missed by all."

Ledford said that Ellis never stopped being an enthusiastic advocate. He visited the General Assembly with Ledford just last winter to lend support on parks issues.

In a eulogy for Ellis, Ledford said, "Two years ago, in a meeting in Kentucky, one of their very respected former state parks directors spoke to me at length about his first meeting with "Red" Ellis, and how he was the epitome of a parks professional and that he had always considered Ellis a mentor.

"Recently, as I was talking with a legislative leader from Rutherford County, he said he knew Ellis' work well. So, some 30 years after retiring, his influence is still known to our legislative leaders. That's impressive, staying engaged with what you believe is important."

SUTTON MOVES TO CLIFFS OF THE NEUSE

Lyndon Sutton has been appointed superintendent of Cliffs of the Neuse State Park in Wayne County. He succeeds Dan Smith, who retired in November.

A superintendent is the chief of operations and administration at a state park or state recreation area with wide-ranging responsibilities for staffing, training, law enforcement, visitor services, natural resource protection and environmental education.

A native of Seven Springs, Sutton graduated from Southern Wayne High School in 1977 and earned a bachelor's degree in physical education at N.C. Wesleyan College in Rocky Mount in 1982. He worked as a seasonal employee at the park alongside Smith from 1979-82



before accepting a ranger position at Jones Lake State Park in Bladen County.

Sutton became a senior ranger at Kerr Lake State Recreation Area in 1988, and was promoted to superintendent at Medoc Mountain State Park in

1997. He is a certified environmental educator.

"Beyond his wealth of experience as a ranger and superintendent in the state parks system, Lyndon brings with him a thorough knowledge of Cliffs of the Neuse State Park as well as a commitment to the community," said Lewis Ledford, director of the division.

"We're fortunate to have a person of Lyndon's caliber in this position as we begin planning for a new visitor center and other amenities at the park."

Sutton said, "I'm sad to be leaving Medoc Mountain, but I'm happy to be going home. I grew up that area and used to ride my bike to the park. I never thought I'd see myself returning as superintendent."

LEE SUPERINTENDENT AT LUMBER RIVER

Neill Lee, a veteran ranger at Lumber River State Park in Columbus and Robeson counties, has been promoted to superintendent of the park. Lee succeeds James Sessoms, who was appointed superintendent of Singletary Lake State Park in Bladen County earlier this year.

A superintendent is the chief of operations and administration at a state park or state recreation area with wide-ranging responsibilities for staffing, training, law enforcement, visitor services, natural resource protection and environmental education.

Lee is a native of Lumberton and graduated from Lumberton High School in 1981. He earned a bachelor's degree in biology at UNC-Chapel Hill in 1988. He began



with the division as a seasonal employee at Fort Macon State Park in 1989 and later worked for two years with the Division of Marine Fisheries.

Lee was hired as Lumber River's first fulltime ranger

when it was established in 1994. He is a certified environmental educator, canoe instructor and has directed the park's natural resource protection program.

"Neill has broad experience and valuable knowledge of the state park, the Lumber River and the communities surrounding both," said Lewis Ledford, director of the division. "As the park continues to grow and face new challenges, we're very pleased to have someone with this experience and knowledge in the superintendent's position."

Lee said he is looking forward to the new challenges. "I hope to continue in James' footsteps in protecting the natural resources of the Lumber River and making it a unique recreational opportunity for our visitors," he said.

North Carolina State Parks

Monthly Attendance Report

November, 2006

PARK	NOVEMBER 2006	TOTAL YTD NOV. 2006	NOVEMBER 2005	TOTAL YTD NOV. 2005	% CHANGE (2005/2006)	
					NOV.	YTD
Carolina Beach	15,216	236,336	14,533	230,416	5%	3%
Cliffs of the Neuse	6,881	111,507	5,838	90,420	18%	23%
Crowder's Mountain	35,008	334,230	28,006	322,279	25%	4%
Dismal Swamp	524					
Eno River	22,155	293,224	22,459	298,859	-1%	-2%
Falls Lake	26,706	926,419	28,312	864,064	-6%	7%
Fort Fisher	19,103	626,486	20,113	606,763	-5%	3%
Fort Macon	56,826	1,168,034	61,752	1,164,958	-8%	0%
Goose Creek	8,889	100,779	12,561	133,932	-29%	-25%
Gorges	6,710	109,543	2,988	106,839	125%	3%
Hammocks Beach	6,108	118,329	7,293	128,904	-16%	-8%
Hanging Rock	25,137	393,495	29,064	370,651	-14%	6%
Haw River State Park	2,795					
Jockey's Ridge	70,361	1,008,657	40,491	942,559	74%	7%
Jones Lake	3,786	63,655	3,592	74,240	5%	-14%
Jordan Lake	63,991	988,265	29,652	1,437,415	116%	-31%
Kerr Lake	24,488	1,131,188	55,660	1,597,340	-56%	-29%
Lake James	11,486	646,346	13,746	368,747	-16%	75%
Lake Norman	17,694	426,780	21,630	441,294	-18%	-3%
Lake Waccamaw	3,944	89,434	4,398	80,888	-10%	11%
Lumber River	6,984	77,322	6,450	62,369	8%	24%
Medoc Mountain	3,813	51,257	2,788	45,520	37%	13%
Merchant's Millpond	18,044	181,209	14,744	209,880	22%	-14%
Morrow Mountain	28,700	342,282	13,640	197,040	110%	74%
Mount Jefferson	8,704	86,207	6,768	76,455	29%	13%
Mount Mitchell	8,123	284,527	10,120	228,363	-20%	25%
New River	6,464	204,581	7,990	134,744	-19%	52%
Occoneechee Mountain	4,578	52,818	4,581	49,381	0%	7%
Pettigrew	5,589	71,351	3,985	67,988	40%	5%
Pilot Mountain	32,550	378,445	39,756	383,489	-18%	-1%
Raven Rock	8,545	93,165	9,292	101,610	-8%	-8%
Singletary Lake	1,861	33,651	2,602	40,278	-28%	-16%
South Mountains	15,514	195,678	13,150	183,772	18%	6%
Stone Mountain	27,940	393,592	28,832	363,708	-3%	8%
Weymouth Woods	4,468	42,357	3,221	39,432	39%	7%
William B. Umstead	42,671	564,629	30,026	538,370	42%	5%
SYSTEMWIDE TOTAL	652,356	11,825,778	600,033	11,982,967	9%	-1%



Our Mission Remains...

to protect North Carolina's **natural diversity**;

to provide and promote **outdoor recreation** opportunities throughout North Carolina;

to exemplify and encourage **good stewardship** of North Carolina's natural resources for all citizens and visitors.

8,000 copies of this public document were printed at a cost of \$554.90 or \$0.069 per copy.

SAFETY ZONE

RESPECT THE POWER OF ELECTICITY

✓Never alter plugs to make them fit sockets; grounds are there for a reason.

✓Inspect electrical cords and plugs before using them. Replace or repair those that are worn or damaged.

✓When working outside, use only extension cords that are specifically rated for outdoor use.

✓Isolate all potential energy sources whenever you perform any troubleshooting, maintenance or repairs.

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